BY ORDER OF THE COMMANDER HILL AIR FORCE BASE (AFMC)



AFMC INSTRUCTION 21–108 HILL AIR FORCE BASE Supplement 1 20 DECEMBER 2000

Maintenance

MAINTENANCE TRAINING AND PRODUCTION ACCEPTANCE CERTIFICATION (PAC) PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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AFMCI 21-108, 26 April 2000, is supplemented as follows:

- 1.1.3. (Added). If a product directorate has internal requirements beyond the scope of this supplement, those requirements will be documented in a directorate OI.
- 1.3.1. (Added). Depot Operations Contract Augmented Teams (DO-CAT's) members are certified using PAC requirements. Record of his or her training will be kept in each member's PAC record, AFMC Form 75, Job Certification Standard.
- 1.3.2. (Added). Special training and certification requirements involving contract workload and Defense Contract Management Agency (DCMA) will be addressed in each directorate Operating Instruction (OI).
- 1.8. To identify contract workers in the Production Acceptance Standard System (PACSS) the word "contract" or "CAT" will be entered in the contract workers labor resource ID.
- 1.9.1. (Added). To support the Annual PAC Review each directorate will provide PAC qualified or quality assurance specialist (QAS).
- 1.9.2. (Added). In the review, at a minimum two PAC records will be reviewed for accuracy from each supervisor using PACSS.
- 1.9.3. (Added). Directorates will provide monthly review results on PAC Documentation Reviews and PAC Decertification Trends to LGQ for trend analysis.

- 1.11. (Added). Headquarters Automated Production Acceptance Certification Standard System, GO-15 has six sections. They are:
- 1.11.1 (Added). **Section 1:** Employee information and supervisor history. The office symbol in the PACSS will be a minimum of five digits. If the office symbol is less than five digits an X will be placed in remaining spaces.
- 1.11.2. (Added). **Section 2:** Course training data. G = General Core Training which each employee must receive before certification is granted on any task. S = Skill Core Training is determined by employees series and work center. T = Task Knowledge Training relates to a specific task. A Matrix should be used in the PACSS to provide all training and task needs for new employees. Quality task evaluations (QTE) may also be tracked in this section coded as QTE.
- 1.11.3. (Added). **Section 3:** Shows specific tasks, employee certification, and decertification in those tasks. In the PACSS, the first 2 digits of the 15 digit task will show in which directorate the task is used, such as LA, LI, LM, or TI. The third digit will be a dash (-) to highlight the directorate. At their discretion the Product Directorates will use digits 4 thru 15 to further identify tasks.
- 1.11.4. (Added). **Section 4:** Training Summary lists reasons employees were granted equivalency. Summary of other training may also be listed.
- 1.11.5. (Added). **Section 5:** Lists the reason the employee was decertified. This section can also list what training is needed to re-certify this employee.
- 1.11.6. (Added). **Section 6:** Annual Certification Review. Employee and supervisor review PAC record for accuracy. Every effort should be made to retain this section until all signature blocks have been filled.
- 1.12. (Added). The supervisor and employee will sign AFMC Form 75, Job Certification Standard, pages having signature blocks.
- 2.1. To maintain courseware control, all developed courses, SSQ guides and SOJT guides must be controlled through the Industrial and Logistics Training Division (OO-ALC/TIU) Courseware Library.
- 2.11. (Added). Courseware Development Fee For Service.
- 2.11.1 (Added). OO-ALC/TIU has implemented fee for service for courseware development. These policies and procedures are applicable to all types of courseware requiring development, IAW Industrial and OO-ALC/TIU courseware development fee for service.
- 2.11.2. (Added). All development requirements must be requested by a letter to the Industrial and OO-ALC/TIU from the organizations identifying the type of development they require. If the requirement is common to all Directorates, the Center Maintenance Training Manager will provide the letter.
- 2.11.3. (Added). All courseware will be validated by an assigned subject matter expert (SME) who will certify that the courseware is technically accurate and comprehensive (meets intent) in cooperation with the instructor.
- 2.11.4. (Added). OO-ALC/TIU approves all courseware after review and coordination by SME and product division.

- 3.2. See paragraph 4.3 of this supplement for added OO-ALC SSQ requirements.
- 3.3. Facilities Equipment Maintenance System (FEMS) is a computer generated trouble call document used to track called in problems. The supervisor or designated employee will enter the PAC code in the line provided. The certified employees will stamp their certification in the employee signature line upon completion of work.
- 3.4.1. (Added). Stamps used to certify WCD's are listed in AFMCI 21-110 Depot Maintenance Technical Data and Work Control Documents. Each product directorate will have an OI covering control of stamps.
- 3.4.2. (Added). Personnel assigned to perform a PAC task must have a PAC record (AFMC Form 75) assigned to them. Military personnel refer to paragraph 3.20 of instruction and this supplement.
- 3.7. Safety items that relate to certification or safety in the job area will be documented in the PACSS.
- 3.7.1. Maintenance stamps will not be issued to any employee until they have completed PAC Familiarization Training.
- 3.13.1. (Added). As a minimum decertification criteria will be the items that are listed in AFMCI 21-108 paragraph 3.13. Additional items maybe added by supervision.
- 3.13.2. (Added). The number of decertifications and reasons, will be reported to the Center PAC Working Group quarterly to see if there is a systemic problem. Reasons for decertification will be workmanship or administrative.
- 3.19.1. (Added). For employees loaned less than 30 days, the employees' assigned supervisor will make PAC records available to gaining supervisor to check certifications. The assigned supervisor maintains responsibility for the employee's certifications.
- 3.19.2. (Added). For employees detailed or transferred the employee must be certified by the new supervisor.
- 3.19.3. (Added). Pen and ink changes to AFMC Form 75 can be made if dates and line items are legible. The supervisor and employee must initial training, certification, and decertification on changes made on paper PAC records.
- 3.19.4. (Added). All hand scribed entries will be updated into the PACSS annually.
- 3.20. Military Training: AF Form 623, Individual Training Record, meets the intent of training in the PAC Program. If additional training is needed while military personnel are on loan to or assigned to an AFMC PAC work area, the supervisor will print out or electronically generate an AFMC Form 75 for that employee. A check of military training records will be made to determine the type and amount of additional training the employee needs to be task certified. The extent of training will be determined by the first level supervisor or higher for that work area. The PAC training takes priority for employee certification. To certify work performed, military personnel will use their designated employee stamp.

- 4.3. Local SSQ requirements are: Shot Peening, High Pressure Water Stripping/Cleaning, Hardness Test, Hazardous Chemical Handling, H-70 (Hydrazine) Fuel Spill Management and Neutralization, Portable Milling, Liquid Nitrogen, Aircraft Engine Inlet Inspection, Auxiliary Power Unit, Foreign Object Inspection/Maintenance, and Aircraft Marshalling. Refer to paragraphs 4.10.22. through 4.10.32. of this supplement for additional information on mandatory SSQ requirements.
- 4.4. SSQ testing using tech data will be an open book test with exception to emergency procedures or instructions/regulations stating otherwise.
- 4.5.1.1. (Added). Must be appointed in writing by directorate or division where they reside.
- 4.5.1.2. (Added). Must keep a copy of their letter of authorization, SSQ guide, and checklist that applies to their qualification duties.
- 4.10.15.2. All qualifications for soldering will be done through OO-ALC/TIU.
- 4.10.15.5.1. Requalification will be annually through OO-ALC/TIU. A written examination must be taken with a score of 85 percent (corrected to 100 percent). This will be an open book test.
- 4.10.15.6. Qualification/certification can be revoked for failing to requalify within one year from the last qualification/requalification date. If the time between re-qualifications exceeds two years, initial SSQ requirements must be met to be qualified.
- 4.10.15.7.1. Eye exams will be required only if there are signs of deteriorating work. The supervisor and employee will review the findings and make appropriate actions.
- 4.10.22. (Added). Shot Peening
- 4.10.22.1. (Added). Reference Documents: AMS-S-13165.
- 4.10.22.2. (Added). Application: Personnel who operate shot peening machine.
- 4.10.22.3. (Added). Qualification: After completion of training, the individual must be able to demonstrate proficiency through oral and practical examinations. Must be able to pass a written test with a minimum score of 80 percent (corrected to 100 percent).
- 4.10.22.4. (Added). Requalification: Annually, or whenever individual fails to demonstrate adequate proficiency.
- 4.10.22.5. (Added). Disqualification: Documented deficiencies, valid customer complaints, or failure to maintain the required level of proficiency.
- 4.10.23. (Added). High Pressure Water Stripping/Cleaning:
- 4.10.23.1. (Added). Reference Documents: Aqua Miser Handbook.
- 4.10.23.2. (Added). Application: High Pressure Water Stripping Cleaning Equipment Operator.

- 4.10.23.3. (Added). Qualification: After completion of training, the individual must be able to demonstrate proficiency to a qualifying official. Must be able to pass a written test with a minimum score of 80 percent (corrected to 100 percent).
- 4.10.23.4. (Added). Requalification: Annually or whenever individual fails to demonstrate adequate proficiency.
- 4.10.23.4. (Added). Disqualification: When there are documented deficiencies, valid customer complaints or failure to maintain the required level of proficiency.
- 4.10.24. (Added). Hardness Test:
- 4.10.24.1. (Added). Reference Documents: TO 1-1A-9 and other applicable references.
- 4.10.24.2. (Added). Application: Nondestructive Testers.
- 4.10.24.3. (Added). Qualification: After completion of training and testing, the individual must be able to demonstrate proficiency to qualifying official. Must be able to pass a written test with a minimum score of 80 percent (corrected to 100 percent).
- 4.10.24.4. (Added). Requalification: Is required annually or when there is a specific reason to question the ability of a technician for qualification in a given process.
- 4.10.24.5. (Added). Disqualification: Documented deficiencies, valid customer complaints, or failure to maintain the required level of proficiency.
- 4.10.25. (Added). Hazardous Chemical Handling:
- 4.10.25.1. (Added). Reference Documents: TO 42C2-1-7, PO N00251, PO R11211, PO N71631 and other applicable directives.
- 4.10.25.2. (Added). Application: Process, handling, and pumping of solutions (chemical).
- 4.10.25.3. (Added). Qualification: After completion of training, the individual must demonstrate proficiency through oral and practical examinations and pass a written test with a minimum score of 80 percent (corrected to 100 percent).
- 4.10.25.4. (Added). Requalification: Annually or whenever individual fails to demonstrate adequate proficiency.
- 4.10.25.5. (Added). Disqualification: Documented deficiencies, valid customer complaints, or failure to maintain the required level of proficiency.
- 4.10.26. (Added). H-70 (Hydrazine) Fuel Spill Management.
- 4.10.26.1. (Added). Reference Documents: TO 1F-16()-2-49GS-00-1, TOs 1F-16()-2-49JG-001, -002, -003, 42B1-1-18, and other applicable directives.
- 4.10.26.2. (Added). Application: Hydrazine Response Team.

- 4.10.26.3. (Added). Qualification: After completion of training, the individual must be able to demonstrate proficiency through written or oral and practical examinations (simulated). Must be able to complete a 25 question written examination test with a minimum score of 85 percent (corrected to 100 percent).
- 4.10.26.4. (Added). Requalification: Annually or whenever individual fails to demonstrate adequate proficiency.
- 4.10.26.5. (Added). Disqualification: Documented deficiencies, valid customer complaints, or failure to maintain the required level of proficiency.
- 4.10.27. (Added). Portable Milling:
- 4.10.27.1. (Added). Reference Documents: TCTO 1947, 1910, 2034, 1967.
- 4.10.27.2. (Added). Application: Individual operates portable milling unit in modification of some areas of the F-16 aircraft.
- 4.10.27.3. (Added). Qualification: After completion of training, the individual must be able to demonstrate proficiency through oral and practical examinations.
- 4.10.27.4. (Added). Requalification: Annually or whenever individual fails to demonstrate adequate proficiency.
- 4.10.27.5. (Added). Disqualification: Documented deficiencies, valid customer complaints, or failure to maintain the required level of proficiency.
- 4.10.28. (Added). Liquid Nitrogen:
- 4.10.28.1. (Added). Reference Documents: TO 1F-16 ()-3-1, TO 00-25-172, TO 42B7-3-1-1, AFOSH 91-67.
- 4.10.28.2. (Added). Application: Personnel who use liquid nitrogen for panel or structural removal on aircraft.
- 4.10.28.3. (Added). Qualification: Granted after successful completion of the required training and a satisfactory proficiency demonstration to a qualification official.
- 4.10.28.4. (Added). Requalification: Annual written proficiency examination and a practical demonstration of proficiency to the qualification official. Must be able to pass a written test with a minimum score of 80 percent (corrected to 100 percent).
- 4.10.28.5. (Added). Disqualification: Documented deficiencies, valid customer complaints or failure to maintain or demonstrate the required level of proficiency can be grounds for disqualification.
- 4.10.29. (Added). Refer to Jet Engine Inlet Inspections in AFMCI 21-108, Attachment 4 paragraph A4.5. This has been changed from RTR to SSQ requirements. An SSQ official must do all qualifications.

- 4.10.30. (Added). A10 Auxiliary Power Unit:
- 4.10.30.1. (Added). Reference Documents: TO 1A-10A-2-4JG-1, TO 1A-10A-2-12G-1, TO 1A-10A-2-29JG-1, TO 1A-10A-2-71JG-2, TO 00-25-172, DLAM 8210.1, AFI 91-202, AFOSH 91-66, AFOSH 91-100, AFMCI 21-108
- 4.10.30.2. (Added). Application: Aircraft Mechanics, Aircraft Electricians, Aircraft Pneudraulics
- 4.10.30.3. (Added). Qualification: Authorized in writing by the applicable production directorate. An engine run qualifier will accomplish initial qualification, currency and semi-annual regualification.
- 4.10.30.4. (Added). Requalification: Every 6 months, demonstrating proficiency to a qualification, must be able to pass a written test with a minimum score of 85% (corrected to 100 percent).
- 4.10.30.5. (Added). Disqualification: Documented deficiencies, valid customer complaints or failure to maintain or demonstrate the required level of proficiency can be grounds for disqualification.
- 4.10.31. (Added). Foreign Object Inspection/Maintenance (A10 White Area)
- 4.10.31.1. (Added). Reference Documents: TO 1A-10A-2-4JG-1, TO 1A-10A-2-27MS-1, TO 1A-10A-3-1, TO 1A-10A-2-12JG-1, TO 1A-10A-2-27JG-4, TO 1A-10A-2-27JG-5, AFI 91-202, AFOSH STD 91-66, AFOSH STD 91-100, AFMCI 21-108, OO-ALC-HAFB Sup1
- 4.10.31.2. (Added). Application: Aircraft Mechanics, Aircraft Electricians, and Aircraft Pneudraulics.
- 4.10.31.3. (Added). Qualification: After completion of training, the individual must demonstrate proficiency through oral and practical examinations and pass a written test with a minimum score of 85 percent (corrected to 100 percent).
- 4.10.31.4. (Added). Requalification: An annual requirement consisting of a demonstration of continued proficiency to a qualification official and the satisfactory passing of the written examination.
- 4.10.31.5. (Added). Disqualification: Any violation of standard safety practices, failure to maintain the high level of proficiency needed to ensure the safe closure of white area or failure to comply with all published directives applicable to the particular weapon system involved with white area maintenance.
- 4.10.32. (Added). Refer to Aircraft Marshalling in AFMCI 21-108, Attachment 4, paragraph A4.6. This has been changed from RTR to SSQ requirements at this center. An SSQ official must do all qualifications.
- 5.10. OO-ALC/TIU supports technical and logistics training.
- 5.10.10. (Added). Center no-show & returned allocations are handled IAW the TI center scheduling.
- 5.15.12. (Added). Ensures employee that attends SSQ training will return a SSQ checklist with all blocks initialed and signed as needed by SSQ trainer/qualifier, test administrator, and employee.

- 5.15.12. (Added). Sign SSQ checklist and enter information in the PACSS and forward checklist to the training monitor.
- 5.16.7. (Added). Will certify on tasks deemed necessary to produce quality products or services.
- 5.19.5. (Added). Inform supervisor in writing of training given and how many times the employee performed the task or tasks.
- A3.2.6. Recurring training courses and requirements are tracked in the center training system. This training status is sent out monthly to the training monitors in each product directorate.
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- A3.7.6. Recurring training courses and requirements are tracked in the center training system. This training status is sent out monthly to the training monitors in each product directorate.
- A3.8.6. Recurring training courses and requirements are tracked in the center training system. This training status is sent out monthly to the training monitors in each product directorate.
- A4.5. Aircraft Jet Engine Inlet Inspection at Hill AFB has been changed to an SSQ requirement. Refer to paragraph 4.10.29 of this supplement.
- A4.5.4. Qualification: Complete qualification within 60 days after completion of initial/annual training. Granted upon successful completion of required training, and passing a written examination, 85 percent correct is the minimum passing score, corrected to 100 percent, and a demonstration of proficiency to a SSQ official.
- A4.5.5. Requalification: This refresher training must be accomplished every 12 months by completing a written test, (same criteria as initial qualification) and demonstration of proficiency to a SSO official.
- A4.6. Aircraft Marshalling at Hill AFB has been changed to an SSQ requirement. Refer to paragraph 4.10.32 of this supplement.
- A4.6.1. (Added). Disqualification: Documented deficiencies, valid customer complaints, or failure to maintain or demonstrate the required level of proficiency can be grounds for disqualification.
- A4.6.4. Qualification: Granted upon successful completion of required training, and passing a written examination, 85 percent correct is the minimum passing score, corrected to 100 percent, and a demonstration of proficiency to a SSQ official.

- A4.6.5. Requalification: This refresher training must be accomplished every 12 months by completing a written test, (same criteria as initial qualification) and demonstration of proficiency to a SSQ official.
- A4.6.5.1. (Added). Disqualification: Documented deficiencies, valid customer complaints, or failure to maintain or demonstrate the required level of proficiency can be grounds for disqualification.
- A4.10. (Added). Lock Out/Tag Out Training.
- A4.10.1. (Added). Regulatory Documents. AFOSHSTD 91-45, Hazardous Energy Control and Mishap Prevention Signs and Tags and OHSA Standard 29 CFR 1910.147, The Control of Hazardous Energy (Lock Out/Tag Out).
- A4.10.2. (Added). Lead Center. OO-ALC, Hill AFB, Utah
- A4.10.3. (Added). Application. All personnel who may be operating or are qualified equipment maintenance personnel on equipment that requires lock out/tagout procedures. All personnel who have been identified and all production supervisors must attend this training yearly. This will be tracked in the base training system and in PAC record.
- A4.10.4. (Added). Initial Training. Initial training will consist of formal classroom training.
- A4.10.5. (Added). Refresher Training. Refresher training is required every 12 months.
- A4.10.6. (Added). Comments. AF or AFMC standard coursed may be used.
- A5.3. The training manager will keep the SOJT checklist for a period of one year from the date of supervision sign off. The training manager will keep SSQ checklists until requalification is accomplished or employee is no longer required to maintain qualification.

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